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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/138,926 08/24/98 CESARE

F D-6362

EXAMINER

IM52/0410

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NOLAN, S

ART UNIT

PAPER NUMBER

1772

DATE MAILED:

04/10/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trad marks

Office Action Summary

Application No.

09/138,926

Applicant(s)

CESARE et al

Examiner

Sandra Nolan

Group Art Unit

1772



☒ Responsive to communication(s) filed on Jan. 25, 2001

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

- ☒ Claim(s) 1-30 is/are pending in the application.
- Of the above, claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-30 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claims _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

- ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☒ Notice of References Cited, PTO-892
- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) 6
- ☐ Interview Summary, PTO-413
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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DETAILED ACTION

Claims

1. Pursuant to entry of the amendment dated January 25, 2001 (Paper No. 7), claims 1-30 are pending.

Request for Copy of Claims

2. In order to facilitate consideration of the claims, it is requested that Applicant supply a clean copy of all of the pending claims with the next response.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

- W/D
Jan
#13
4. Claims 29 and 30 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The phrase "from about 71% to about 75%" is not supported by the description as originally filed. Please cancel the new matter from the claims.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

W/D, 6. Claims 1, 8, 9, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 04004204A (abstract).

JP 04004204A shows ethylene/alpha-olefin terpolymers that contain a non-conjugated diene monomer along with 30-75% ethylene and 25-70% alpha-olefin (first paragraph). The terpolymers have low molecular weight and may be blended with ethylene/alpha-olefin copolymers (second paragraph). The terpolymers are dispersion agents/aids (title, use/advantage section).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Kuz 9. Claims 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 04004204A (abstract) in view of Applicant's admission at page 1, lines 22-25.

The Japanese abstract is discussed above. The use of the terpolymers as dispersing agents/aids is taught in the title and in the use/advantage section of the abstract. Blends of the terpolymers with ethylene/olefin copolymers are mentioned in the second paragraph.

The abstract does not show reinforcing fillers.

Applicant has admitted, on page 1, at lines 22-25 of the specification, that masterbatch compositions containing large amounts of aramid fibers are known.

Masterbatches are well known to be compositions containing fillers, e.g., reinforcing fibers, and dispersants, which compositions are used to facilitate the dispersion of the fillers therein into matrix polymers to be filled/reinforced.

It would have been obvious to one having ordinary skill in the art at the time that the invention was made to employ the aramid fibers conventionally used in masterbatches, per Applicant's admission, to make a masterbatch using the terpolymers of the Japanese abstract as a dispersing agent/aid and to use that masterbatch to incorporate the fibers into a high molecular weight polymer.

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The motivation to employ the aramid fibers of Applicant's specification as reinforcers in masterbatches containing the terpolymers/blends of the Japanese abstract is found in the specification at page 1, where the conventionality of the fibers and their use in masterbatches is discussed.

The physical state of the terpolymer, i.e., solid at room temperature, is a matter of engineering choice, depending the parameters used during preparation of the terpolymer and the optimal physical state for the masterbatch's use. For example, some processing equipment functions better when solid masterbatches/matrices are used. Other equipment handles liquids or semi-liquid masterbatches/matrices better.

W/D 10. ^{1-9 30} Claims ~~2-7, 15-28~~ and ~~30~~ are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 04004204A (abstract) as applied to claims 10-14 above, and further in view of Gros (US 3,884,993) and Applicant's admission.

The teachings of the JP 04004204A abstract are discussed in the 35 USC 102 and 103 rejections above.

The admission at page 1 of the specification is discussed in the 35 USC 103 rejection above.

The abstract does not teach the molecular weight of the terpolymers or their use with reinforcing fillers.

Gros shows low molecular weight ethylene/propylene/polyene terpolymers derived from Applicant's polyene monomers (col. 2, lines 51+). The terpolymers are blended with EPDM

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rubbers to improve the processability of the resultant compositions (abstract). The terpolymers have molecular weights ranging from below 5,000 (col. 5, line 23) to 25,000 (col. 5, line 9). The compositions made may contain 10 to 200 phr conventional fillers (col. 6, lines 38+). They may be used to make belts and hoses (col. 7, line 8).

It would have been obvious to one having ordinary skill in the art at the time that the invention was made to employ the masterbatches suggested by the combination of the Japanese abstract and Applicant's admission with the rubbers of Gros in order to produce easily processable compositions to be used to make belts and hoses (per Gros).

The motivation to employ the materbatches suggested by the combination of the Japanese abstract and Applicant's admission in the EPDM compositions of Gros is found in the abstract of the Gros patent, where the improved processability of EPDM/low molecular weight terpolymer blends is discussed.

Response to Arguments

11. Applicant's arguments with respect to claims ^{1-9 + 15-30}_n 1-30 have been considered but are moot in view of the new ground(s) of rejection.

Applicant agrees re cls 10-14

Final Rejection

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sandra M. Nolan, whose telephone number is (703) 308-9545. The examiner can normally be reached on Monday through Thursday from 6:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on (703) 308-4251. The fax phone number for the organization where this application is assigned is (703) 305-5408.

The telephone number for the receptionist is (703) 308-0661.



SMN/smn
April 2, 2001
09138926.2



HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772 4/7/01